

CLAIMS:

1. An electronic video camera technique for film origination, including the following features: use of a regular CCD for the color channel and a back-thinned CCD for the luminance channel; use of a red and green checkerboard pattern for the color channel filter; a technique for deriving blue and reconstructing full resolution R, G, B from full resolution white and the red and green checkerboard pattern; a technique for deriving an automatic gain control (AGC) signal using an unshielded white area on the CCD to obtain a white reference; diagonal binning of the signals from a color (red/green) checkerboard pattern; and a technique for using a RAID recorder to store variable frame rate information.